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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,155	10/29/2003	Shinichi Kimura	JP920020172US1	7638
48583	7590	06/27/2007	EXAMINER	
BRACEWELL & GIULIANI LLP PO BOX 61389 HOUSTON, TX 77208-1389			BLOUIN, MARK S	
		ART UNIT	PAPER NUMBER	
		2627		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/696,155	KIMURA ET AL.
	Examiner	Art Unit
	Mark Blouin	2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 April 2007.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-7,9-13,15-17 and 19 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 7,9-13,15-17 and 19 is/are allowed.
 6) Claim(s) 1-3 and 6 is/are rejected.
 7) Claim(s) 4 and 5 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

Detailed Action

Response to Amendment

- The reply filed on April 24, 2007 was applied to the following effect: Claims 1-7, 9-13, and 15-17 were amended , and Claims 8, 14, and 18 were cancelled.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Diel (USPN 5,546,250).
3. Regarding Claim 1, Diel et al shows (Figs. 1-7) a disk drive (10), comprising: a functional unit including a disk serving as an information storage medium (62) and defining x,y, and z directions; a case assembly (10) holding the functional unit therein; and wherein the case assembly is provided with a thick frame bumper (20+52) serving as a shock- absorbing member, and a surface of the frame bumper protrudes from side surfaces of the disk drive beyond other members, and the frame bumper is formed of a core material (20) having a high hardness and an elastic material (52 - elastomer) having a relatively lower hardness than the core material.
4. Regarding Claim 3, Diel et al shows (Figs. 1-5) wherein the frame bumper of the case assembly has a pair of guide rails (section 24) that perform a guide function of detachably mounting the disk drive in a PC card (34).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diel (USPN 5,546,250).

7. Regarding Claim 2, Diel shows (Figs. 1-7) wherein the case assembly includes a top cover (36) located an upper z direction end and covering an upper surface of the disk drive, and, and the frame bumper protrudes in the x direction by a distance in a range of 0.5 to 1.0 mm (Col 3, line 33), but does not show the surface of the frame bumper protrudes in the z direction beyond a surface of the top cover on the upper surface of the disk drive by a distance in a range of 0.5 to 1.0 mm.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the surface of the frame bumper to protrude in the z direction beyond a surface of the top cover on the upper surface of the disk drive by a distance in a range of 0.5 to 1.0 mm. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to make to extend the surface of the frame bumper to protrude in the z direction beyond a surface of the top cover on the upper surface of the disk drive by a distance in a range of 0.5 to 1.0 mm in order to further protect the disk drive.

8. Regarding Claim 6, Diel shows (Figs. 1-5) wherein the elastic material is formed from an elastomer (Col 3, line 60), but does not show the core material is formed of a polycarbonate or nylon resin. Official notice is taken that polycarbonates and nylon resins are commonly used in the art to make lightweight, strong structures and frames.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the frame of Diel from these materials. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to make the frame of Diel from these materials in order to provide the disk drive with a lightweight and strong frame.

Allowable Subject Matter

9. Claims 7,9-13,15-17, and 19 are allowed.

10. The following is an examiner's statement of reasons for allowance:

- **Claim 7** specifies a storage medium defining x,y, and z directions and having an assembly structure capable of being detachably loaded into a PC card, which requires: “...a connector for insertion in a slot formed in the PC card, ***the connector having tapered guide features that provide a guiding function for the storage medium relative to the PC card***; an elastic member forming an external shape not departing from a form factor that is required in mounting the storage medium to the PC card; and wherein positions of two-dimensional side surfaces of an external shape ***is dependent on the connector and the elastic member***, and the elastic member extends beyond a functional unit of the storage medium in the x and z directions. ”

These features, in combination with the other features of Claim 7, are not anticipated by, nor made obvious over, the prior art of record.

- **Claim 13** specifies a disc reading apparatus, which requires:

“...***a thickness*** of the portable precision device in the z direction ***is dependent on a nut, and the nut extends through the connector***. ”

These features, in combination with the other features of Claim 13, are not anticipated by, nor made obvious over, the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

11. Claims 4 and 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments with respect to claims 1-7, 9-13, 15-17, and 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

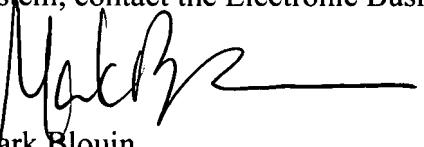
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is 571-272-7583. The examiner can normally be reached on M-F from 6:00 to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. William Korzuch, can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Blouin
Patent Examiner
Art Unit 2627
June 8, 2007

A. J. HEINZ
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